

REMARKS

Reconsideration of this application in light of the present amendment and remarks is respectfully requested.

Claims 1-5, 7, 8, 12-20 and 22-25 have been rejected.

Claims 6, 9-11 and 21 were previously canceled.

Claims 14-17 and 23-24 have been canceled, without prejudice.

Claims 1-5, 7-8, 12-13, 18-20, 22 and 25 have been amended.

Claims 1-5, 7, 8, 12, 13, 18-20, 22 and 25 are pending in this application.

35 U.S.C. §103(a)

Claims 1, 14, 19, 20 and 22-25 have been rejected under 35 U.S.C. §103(a) as being unpatentable over McGowan et al. (US 7,127,267, hereinafter “McGowan”) in view of Lehtinen et al. (US Publ. 2003/0224813, hereinafter “Lehtinen”). This rejection is respectfully traversed.

Independent claim 1 has been amended to incorporate portions of claim 2, 3, 12 and 15, to specify that distance is determined from propagation delay, and to specify that the interference includes an intra-cell interference factor and an inter-cell interference factor. Further support for these changes can be found in the text on page 20 lines 1-2 and lines 28-29, and page 18 lines 9-10.

McGowan (col. 3 lines 5-40 and col. 4 lines 44-67) describes a plurality of base stations that measure SNR from a mobile station and compare this with their transmit power to determine which base station is the most reliable for handoff. However, McGowan does not disclose or suggest the elements of; a) distance, b) distance determined from propagation delay, c) interference, d) intra-cell interference factor and inter-cell interference factor, and e) determining interference in response to distance.

Lehtinen (para. [0074]) describes mobile station measurements of signal to interference ratios from base station signaling, which is reported back to the base station. However, Lehtinen does not disclose or suggest the elements of; a) distance, b) distance determined from propagation delay, d) intra-cell interference factor and inter-cell interference factor, and e) determining interference in response to distance.

Hamalainen (col. 5 lines 55-60 and col. 7 lines 29-44), with regard to claims 2 and 3, discloses delay and distance, but only in general terms. Hamalainen does teach determining distance by measuring path-loss, but this is completely different than, and teaches away from, determining a distance between the subscriber unit and the base station using a propagation delay. Therefore, Hamalainen, along with the McGowan and Lehtinen, in combination or alone,

are still missing the elements of; b) distance determined from propagation delay, d) intra-cell interference factor and inter-cell interference factor, and e) determining interference in response to distance.

Accordingly, applicant respectfully submits that amended claim 1 is patentable and non-obvious over the cited art.

Claim 25 has been amended to include the same recitations as amended claim 1, in method form, and is therefore deemed patentable and non-obvious over the cited art as well, for the same reasons.

Claims 14 and 23-24 have been canceled.

Claim 19 has been recast to reflect that measured data has been compiled for both the inter-cell interference factor and an intra-cell orthogonality interference factor at different locations in the cells, support for which can be found in the text on page 22 lines 12-14. It is important to note that the intra-cell interference factor is an orthogonality factor, whereas the inter-cell interference factor is not. As a result these two factors vary differently with distance and must be considered and estimated differently, which can be done by measurements, which is not contemplated in the cited art. See page 19 lines 7-31 and Fig. 2.

Claim 20 has been recast to reflect how to calculate the intra-cell orthogonality factor, support for which can be found in the text on page 24 lines 8 and 15-23. None of the cited art discloses an intra-cell orthogonality interference factor, therefore none of the cited art could have contemplated how to calculate such factor.

Claim 22 has been recast to reflect how to calculate the resource requirement for a subscriber unit, support for which can be found in the text on page 25 lines 6-24. None of the cited art discloses such calculation.

Moreover, claims 19, 20 and 22 are dependent on amended claim 1, hereby incorporated by reference and previously distinguished, and are therefore deemed allowable as well for the same reasons.

Accordingly, it is respectfully submitted that this rejection has been overcome.

35 U.S.C. §103(a)

Claims 2-5 and 7-8 have been rejected under 35 U.S.C. §103(a) as being unpatentable over McGowan in view of Lehtinen, as applied to claim 1, and further in view of Hamalainen et al. (US 6,701,130, herein "Hamalainen"). This rejection is respectfully traversed.

Claim 2 has been recast to provide an explicit resource requirement definition, support for which can be found in the text on page 18 lines 4-16. Claim 2 introduces specific intra-cell and inter-cell interference factors. These factors are typically the main contributors towards non-uniform power requirements between different subscriber units. Accordingly, rather than use

nominal or average values for these parameters, the interference characteristic is used in the present to determine resource requirements associated with the individual subscriber unit. None of the cited art disclose or suggest the elements of amended claim 2.

Claim 3 has been amended to reflect that the intra-cell and inter-cell interference factors are determined in response to the distance characteristic by biasing each of the interference factors relative to a nominal value. Support for this can be found in the text on page 20 lines 7-21. The cited art does not teach intra-cell and inter-cell interference factors, and therefore could not have envisioned the intra-cell and inter-cell interference factors being determined in response to the distance characteristic by biasing each of the interference factors relative to a nominal value.

Claim 5 has been recast to reflect that the nominal value of claim 3 is a minimum value that is increased dependent on an increased distance between the subscriber unit and the base station. Support for this can be found in the text on page 20 lines 7-21. The cited art does not teach intra-cell and inter-cell interference factors, and therefore could not have envisioned the intra-cell and inter-cell interference factors being determined in response to the distance characteristic by biasing each of the interference factors relative to a nominal value, or further that the nominal value is a minimum value that is increased dependent on an increased distance between the subscriber unit and the base station.

Moreover, claims 2-5 and 7-8 are dependent on amended claim 1, hereby incorporated by reference and previously distinguished, and are therefore deemed allowable as well for the same reasons.

Accordingly, it is respectfully submitted that this rejection has been overcome.

35 U.S.C. §103(a)

Claims 12-13 and 15-18 have been rejected under 35 U.S.C. §103(a) as being unpatentable over McGowan in view of Lehtinen, as applied to claim 1, and further in view of Palenius (US Publ. 2003/0096618). This rejection is respectfully traversed.

Claim 12 has been recast to reflect how the inter-cell and intra-cell interference factors are determined. None of the cited art distinguishes between inter-cell and intra-cell interference factors, and therefore none of the cited art could have envisioned how these are determined.

Claim 13 has been recast to reflect that the association between the interference factors and distance is determined from a look-up table, support for which can be found in the text on page 22 lines 18-20. None of the cited art relates inter-cell and intra-cell interference factors and distance, and therefore none of the cited art could have envisioned how these can be determined through a look-up table.

Claims 15-17 have been canceled.

Regarding claim 18, it is important to note that the intra-cell interference factor is an orthogonality factor, whereas the inter-cell interference factor is not. As a result these two factors vary differently with distance and must be considered and estimated differently, which is not contemplated in the cited art. See page 19 lines 7-31 and Fig. 2.

Moreover, claims 12, 13 and 18 are dependent on amended claim 1, hereby incorporated by reference and previously distinguished, and are therefore deemed allowable as well for the same reasons.

Accordingly, it is respectfully submitted that this rejection has been overcome.

The other references of record have been reviewed and applicant's invention is deemed patentably distinct and nonobvious over each taken alone or in combination.

For the foregoing reasons, applicants respectfully request that the above rejections be withdrawn.

Inasmuch as this amendment distinguishes all of the applicants' claims over the prior art references, for the many reasons indicated above, passing of this case is now believed to be in order. A Notice of Allowance is earnestly solicited.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein. No amendment made was for the purpose of narrowing the scope of any claim, unless applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

Authorization is hereby given to charge any fees necessitated by actions taken herein to Deposit Account 50-2117.

Respectfully submitted,
Matthew J. Dillon

Customer Number 22917
Motorola, Inc.
Law Dept. - 3rd floor
1303 E. Algonquin Rd.
Schaumburg, IL 60196

By: /Brian Mancini/
Brian M. Mancini
Attorney for Applicant(s)
Registration No. 39,288
Phone: (847) 576-3992
FAX: (847) 576-3750